

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An improved electromagnetic work coil for removing dents from a conductive work piece, comprising:

a. a coil with insulated conductor windings passing through a clamped stressing region;

b. at least one clamp member located on said stressing region, said clamp member including two clamp surfaces and a part in tension outside of the stressing region to tangentially compress said conductor windings in the stressing region, and;

c. said conductor windings forming symmetric paths to form symmetrically aligned magnetic poles around said clamped stressing region, said conductor windings being tapered to increase in height and width outside of the stressing region to improve thermal and electrical conductivity and decrease the magnetic field outside of the stressing region.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

1 6. (Cancelled)

2

3 7. (Cancelled)

4

5 8. (Cancelled)

6

7 9. (Cancelled)

8

9 10. (Cancelled)

10

11 11. (Cancelled)

12

13 12. (Cancelled)

14

15 13. (Currently Amendment) An improved electromagnetic work coil for electromagnetic
16 dent removal with a power supply that slowly energizes and more rapidly de-energizes said
17 work coil to inductively impart a pulling force on an adjacent conductive work piece, said
18 work coil comprising a coil with windings that include a conductor surrounded by insulation,
19 said work coil divided into regions with a working surface to be placed adjacent to said
20 conductive work piece, said windings passing through at least one stressing region and at
21 least one return path region, said windings including a first winding turn and a second
22 winding turn, the portion of said windings passing through said return path region being
23 wider in a direction that increases the distance from said first winding turn to said second

1 winding turn than the portion of said windings passing through said stressing region ~~thereby~~
2 ~~improving the efficiency of the inductance of said work coil and improving thermal transfer~~
3 ~~of heat away from said stressing region.~~

4
5 14. (Currently Amended) The work coil as recited in claim 13, wherein said windings in
6 said stressing region are constrained by at least one clamp member, the clamp member
7 including two clamp surfaces on opposing sides of said stressing region, said clamp member
8 applying a pressure to tangentially compress the windings in the said stressing region.

9
10
11 15. (Original) The work coil as recited in claim 13, wherein said windings are divided into
12 two return path regions so the combined widths of the portions of said windings in said return
13 path regions are greater than the width of the portion of said conductor windings that pass
14 through said stressing region.

15
16 16. (Original) The work coil as recited in claim 15, wherein said windings are equally
17 divided into said return path regions to form a symmetrically balanced magnetic field around
18 said windings passing through said stressing region.

19
20 17. (Currently Amended) The work coil as recited in claim 13, wherein said conductor in
21 the portion of said windings passing through said return path region is thicker in the direction
22 measured on said working surface than said conductor in the portion of said windings passing
23 through said stressing region.

1 18. (Original) The work coil as recited in claim 13, wherein said insulator in the portion of
2 said windings passing through said return path region is thicker than said insulator in the
3 portion of said windings passing through said stressing region.
4

5 19. (Original) The work coil as recited in claim 13, wherein said conductor in the portion of
6 said windings passing through said stressing region are strengthened behind with a bonded
7 secondary conductor having greater electrical resistance.
8

9 20. (New) An improved electromagnetic work coil for electromagnetic dent removal with
10 a power supply that slowly energizes and more rapidly de-energizes said work coil to
11 inductively impart a pulling force on an adjacent conductive work piece, said work coil
12 comprising a coil with windings that include a conductor surrounded by insulation, said
13 windings including a first winding turn and a second winding turn, said windings passing
14 through at least one stressing region and at least one return path region, the distance from said
15 first winding turn to said second winding being greater in said return path region than the
16 distance from said first winding turn to said second winding turn in said stressing region.
17
18
19
20
21
22
23